



Mobility Fund II Support for Rural Agriculture

November 3, 2016

The Agricultural Broadband Coalition

The Agricultural Broadband Coalition ("ABC"), formerly known as the Rural Broadband Working Group, is comprised of U.S. agricultural sector organizations including

- The American Farm Bureau Federation ("AFBF")
- The American Soybean Association ("ASA")
- The National Corn Growers Association ("NCGA")
- The Association of Equipment Manufacturers ("AEM")
- The Agricultural Retailers Association ("ARA")
- Deere & Company ("John Deere")
- Trimble Navigation Limited ("Trimble")
- AGCO Corporation ("AGCO")
- Case New Holland Inc. ("Case")

Mobile Broadband Coverage for Agricultural Operations

- People working in and dependent on the agricultural sector are intensely interested in expediting the deployment of mobile broadband services to farms and cropland.
- Wireless service is necessary for farmers and ranchers who use precision agricultural equipment.
- The wireless connection allows farmers and ranchers to make real-time data transfers that can minimize the amount of necessary seed, fertilizer and pesticides, reduce costs for fuel, labor, water, and identify best practices for fields in a given location.
- State-of-the-art data and information solutions greatly enhance agricultural productivity and sustainability.

US Agricultural Sector

- Agriculture is a major economic driver in rural areas; rural populations are employed directly on farms or work in businesses that are dependent on agricultural operations.
- Agricultural operations are a significant economic sector: 17.3 million jobs in U.S. in agriculture with 2.6 million direct on-farm; related industries include 14.7 million jobs.
- Average net cash farm income for 2016 is forecast to be \$102,200.
- About 97 percent of U.S. farms are operated by families – individuals, family partnerships or family corporations.

US Agriculture Has Always Been Technology Driven

Recent Senate letter to Chairman Wheeler from Senators Roger Wicker (R-MS) and Joe Manchin (D-WVA), and a bipartisan group of 24 other Senators from rural states, described today's challenge to the U.S. agricultural sector:

"American farmers and ranchers seek to feed, fuel, and clothe an ever increasing global population using limited land, water and other resources."

To achieve these goals, the nation's farmers look to precision agriculture techniques which increasingly require high-speed mobile broadband.

"Mobility is essential for new precision agriculture technologies to deliver productivity gains and environmental sustainability... [but] broadband, particularly high speed mobile broadband, is not readily available in many rural areas..."

Access to Mobile Broadband in Agricultural Areas is Inadequate

Significant areas of agricultural activity do not have access to high speed mobile broadband services.

Private investment is not bringing wireless broadband to agricultural areas, i.e., “croplands”.

Senators urged the Commission to do more to address the mobile broadband needs of rural Americans in the agricultural sector:

“Croplands and ranch lands have lagged behind in adequate mobile coverage, even as demand for coverage has grown. To address this coverage gap, we urge you to consider a metric of broadband access in croplands (and farm buildings), or some other geographic measurement, in addition to road miles, to identify these areas of greatest need. “Cropland” coverage can be assessed using United States Department of Agriculture data for crop operations, the United States Geological Survey’s Land Use classification, or other databases.”

How Can Mobility Fund II Address Agricultural Demand for Broadband?

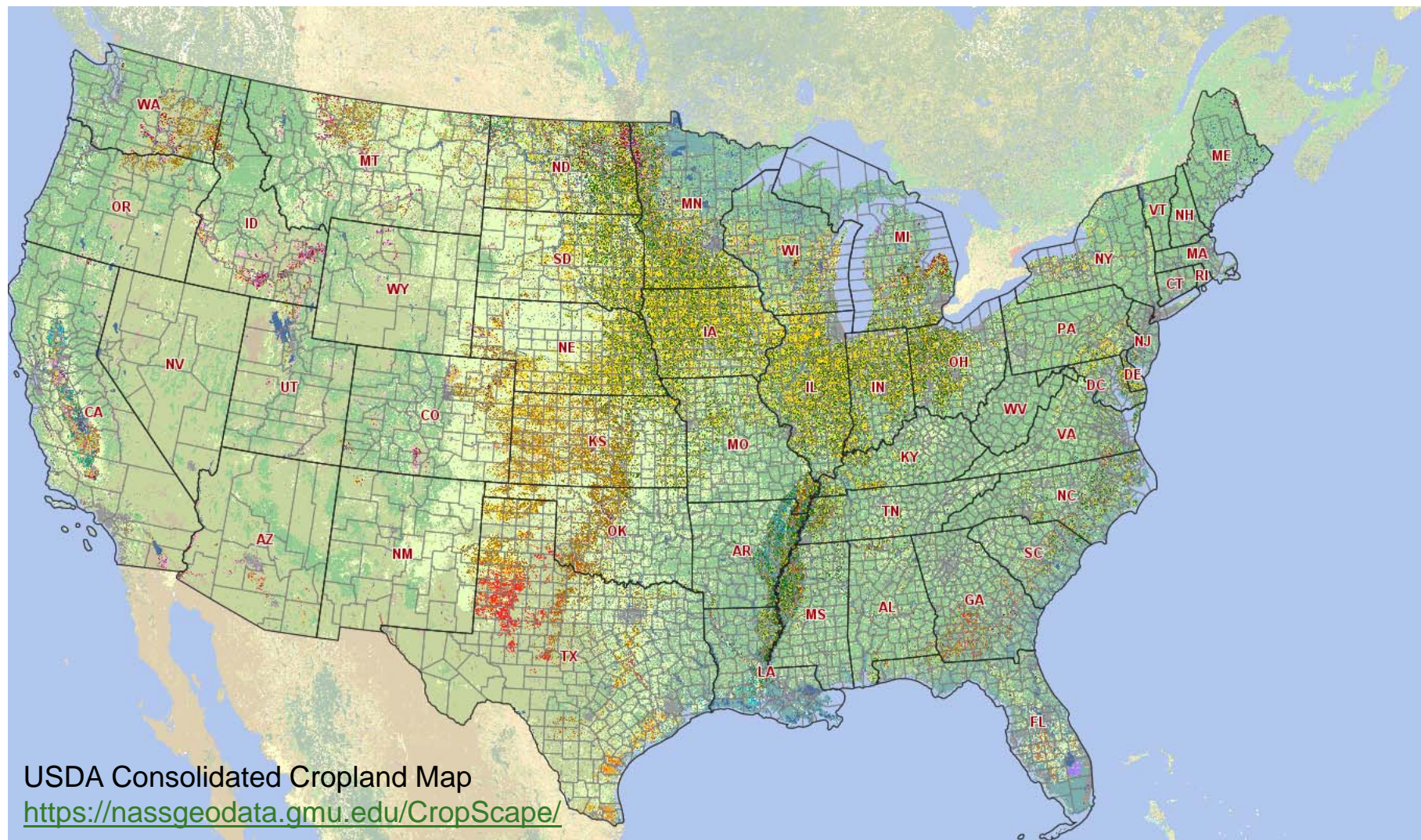
Mobility Fund II goal is to support rural broadband deployment to serve the needs of rural Americans where they “live, work or travel.”

Commission Rules should measure and support bringing 4G wireless broadband to croplands.

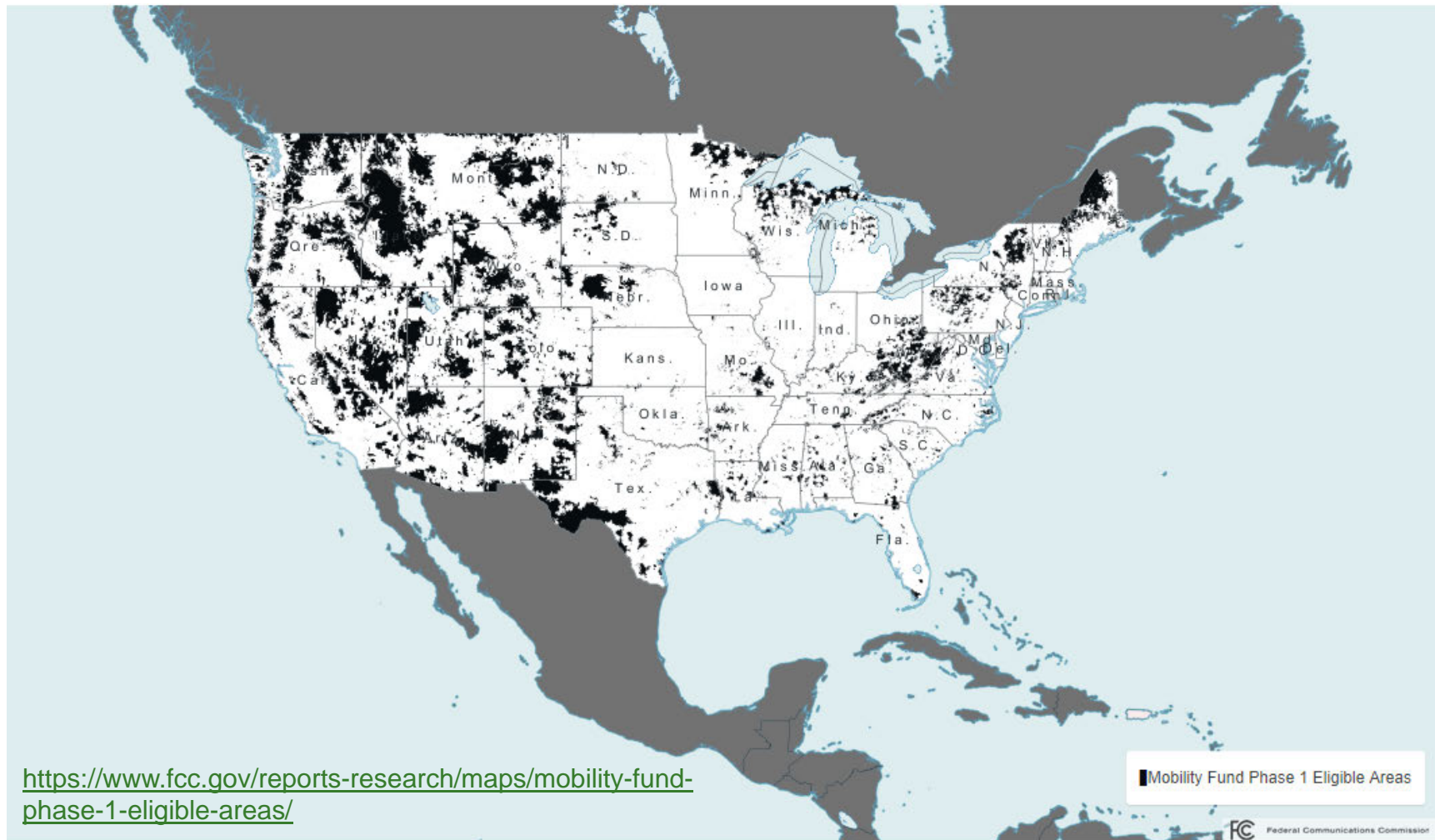
How can Commission MF-II rules specifically address the broadband needs in agricultural areas?

- Consider cropland acreage in determining MF-II eligibility and/or bid weighting.
- Adjust construction milestones and coverage requirements to ensure that carriers construct networks that cover cropland in addition to roads and population centers.

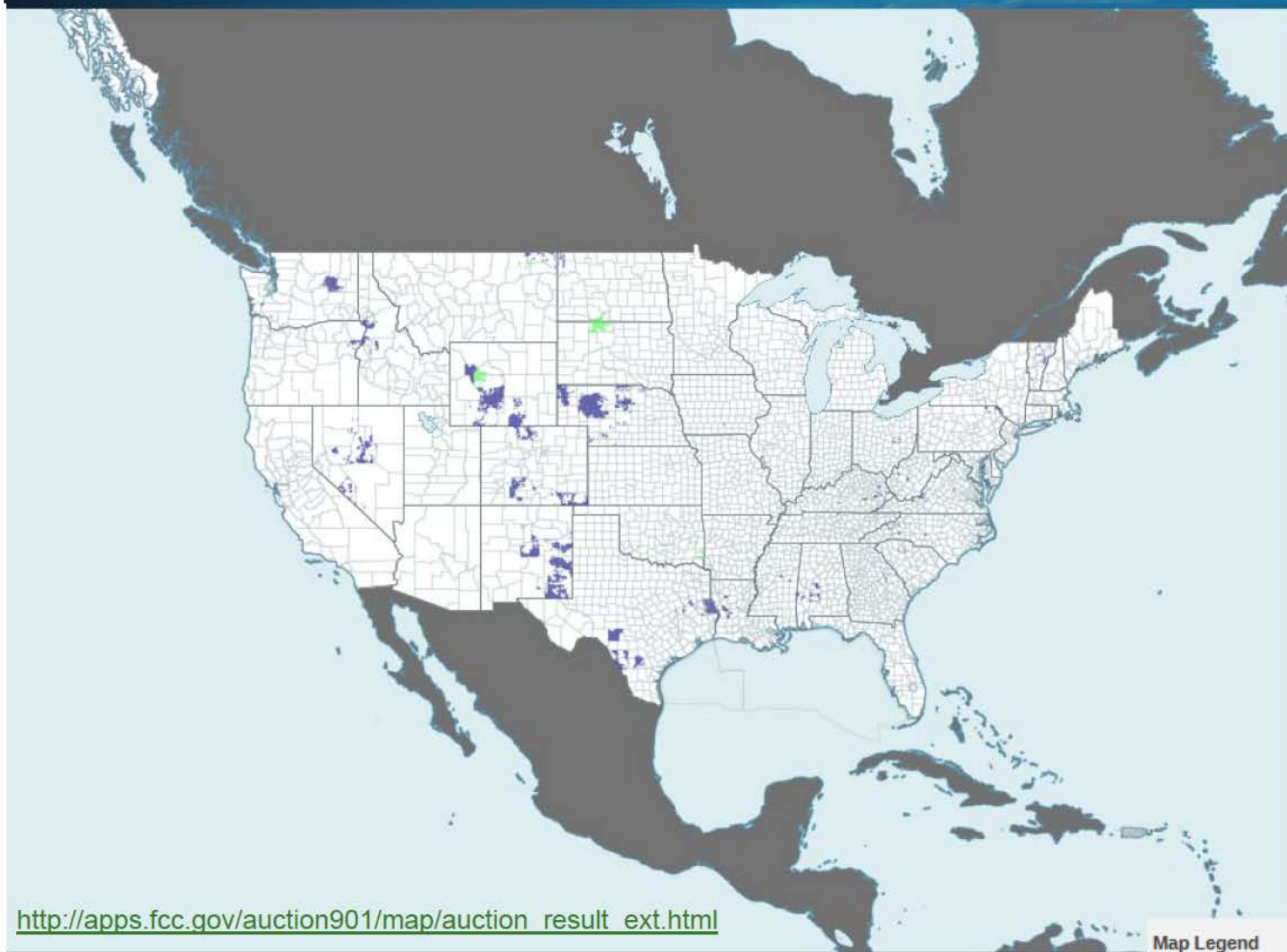
CropScape - Cropland Data Layer



Mobility Fund Phase 1 Eligible Areas

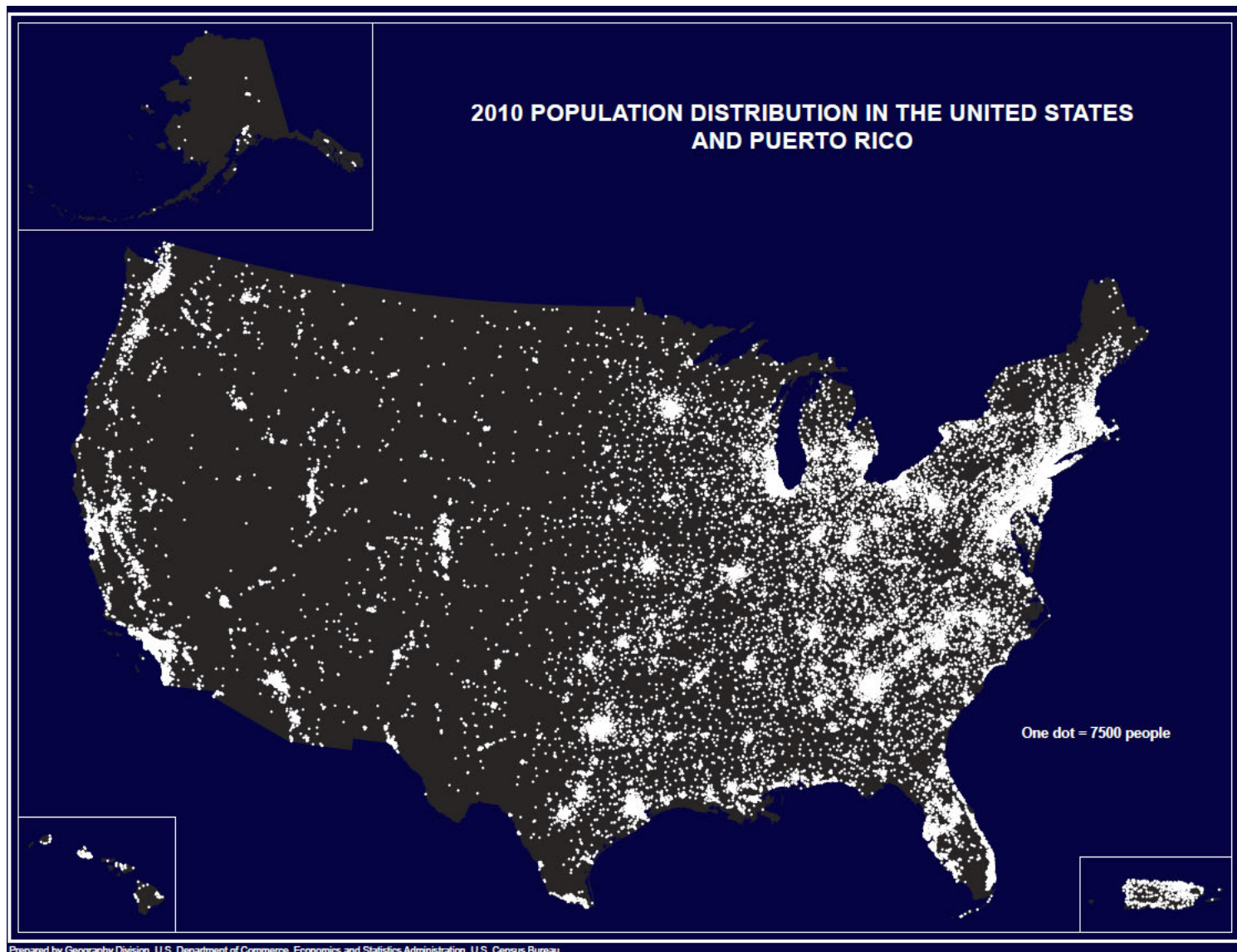


Mobility Fund Phase I Auction Results Map



Map Legend

- State
- Tribal Land



Prepared by Geography Division, U.S. Department of Commerce Economics and Statistics Administration U.S. Census Bureau

http://www2.census.gov/geo/maps/dc10_thematic/2010_Nighttime_PopDist/2010_Nighttime_PopDist_Page_Map.pdf

Next Steps